8-19-89
12.3.8 v.5

SEE0050

ASH GROVE CEMENT

JOB PLAN

D.E. Neustel
Westinghouse
Engineering
Service
08-11-89

Manpower:
2 Westinghouse
3 electricians
2 waste handlers
4 riggers

Equipment:
rigger: mobile crane
crew truck with forklift
2 - semi-tractor/trailer rigs

waste handler: 1 - semi-tractor/trailer rigs

electricians: crew/equipment truck

Day 1 -- Friday August 18, 1989 ---- Start 7:00 AM - End 7:00 PM

1. Finish Mill 1 & 2 (two(2)-1000 KVA Replacement Transformers serials PAL 3846-0101/02)
   - 1.1 open/remove/lock/tag 4160v breakers - two total
   - 1.2 install temporary grounds on LV and HV
   - 1.3 remove substation enclosure fencing
   - 1.4 set up temporary lighting/generator(s)
   - 1.5 drain PCB transformers
   - 1.6 electrically and mechanically disconnect the PCB transformers
     - a. burn and grind off existing transformer base anchors
     - b. disassemble the HV air terminal chambers/move cables
     - c. record PCB transformer Tap Changer Position
   - 1.7 move out & load the east PCB transformer
   - 1.8 move out & load the west PCB transformer
   - 1.9 manifest generated wastes
   - 1.10 set in place replacement west transformer
   - 1.11 set in place replacement east transformer
   - 1.12 re-install substation enclosure fencing
   - 1.13 electrically and mechanically reconnect the replacement transformers
     - a. drill and bolt HV and LV flanges
     - b. install transformer tank ground
     - c. install transformer base anchors
     - d. reassemble HV air terminal chambers/cables
     - e. check Tap Changer Position to agree with removed units
     - f. bring tank pressure to +2.5 psi with dry Nitroge
   - 1.14 perform megger test
   - 1.15 remove grounds/tags/locks and install 4160v breakers
   - 1.16 energize replacement transformers
   - 1.17 check rotation
   - 1.18 remove temporary lighting/generators

2. Clinker Silo (one(1)-750KVA Transformer serial PAL 3845-0101)

NOTE: Do as much of the following work on August 18, 1989, to keep suubcontractor personnel productive. Uncompleted to be performed August 19, 1989 in conjunction with the Group 2 Silo transformer changeout.

2.1 open/remove/lock/tag 4160v breaker - one total
2.2 install temporary grounds on LV and HV
2.3 set up temporary lighting/generator(s)
2.4 drain PCB transformer
2.5 electrically and mechanically disconnect the PCB transformer
    a. disassemble the HV air terminal chambers/move cables
    b. record PCB transformer Tap Changer Position
2.6 move out & load the PCB transformer
2.7 manifest generated wastes
2.8 set in place replacement transformer
2.9 electrically and mechanically reconnect the replacement transformer
    a. drill and bolt HV and LV flanges
    b. install transformer tank ground
    c. reassemble HV air terminal chambers/cables
    d. check Tap Changer Position to agree with removed unit
    e. bring tank pressure to +2.5 psi with dry Nitrogen
2.10 perform megger test
2.11 remove grounds/tags/locks and install 4160v breaker
2.12 energize replacement transformer
2.13 check rotation
2.14 remove temporary lighting/generator(s)

Day 2 -- Saturday, August 19, 1989 ---- Start 7:00 AM - End 7:00 PM

NOTE: Perform any unfinished 2.1 through 2.14 items.

3. Group 2 Silo (one(1)-750KVA Transformer serial PAL 3845-0102)

3.1 open/remove/lock/tag 4160v breaker - one total
3.2 install temporary grounds on LV and HV
3.3 set temporary lighting/generator(s)
3.4 drain PCB transformer
3.5 electrically and mechanically disconnect the PCB transformer
    a. disassemble the HV air terminal chambers/move cables
    b. record PCB transformer Tap Changer Position
    c. remove existing fan conduit/pull wiring back to breaker panel
3.6 move out & load the PCB transformer
3.7 manifest generated wastes
3.8 set in place replacement transformer
3.9 electrically and mechanically reconnect the replacement transformer
    a. drill and bolt HV and LV flanges
    b. install transformer tank ground
    c. reassemble HV air terminal chambers/cables
    d. check Tap Changer Position to agree with removed unit

e. install transformer Oil Tempature Indicator
f. bring tank pressure to +2.5 psi with dry Nitrogen

3.10 perform megger test
3.11 remove grounds/tags/locks and install 4160v breaker
3.12 energize replacement transformer
3.13 check rotation
3.14 remove temporary lighting/generator(s)

Contractor Listing:

Rigger: Shaughnessy and Co.
221 30th NW
Auburn, Wa. 98002
(206) 852-1110
Dick Mattheis

Waste Handlers: Aptus, Inc. (wholly owned Westinghouse subsiduary)
P.O. Box 935
Coffeyville, Kansas 67337
1-800-292-2558
Jeanie Martin

Electricians: Seven Sisters
P.O. Box 719
Sedro Woolley, Wa. 98284
(206) 856-0842
Ted Dance
Gary Ford (Job site foreman)

Westinghouse Manifest Number: SEE9021

NOTE: If more than one manifest is written, add -A, -B, etc. to the above number. This number is to be placed above the Aptus number appearing in the manifest form's document number block.

Additional Equipment/Materials from Westinghouse shop:

1. Bale of 3M type 156 absorbent pads (partial)
2. Roll of 6 mil plastic sheeting (partial)
3. 8 each LV Terminal Adapters with hardware
4. Replacement Temperature Indicator for Serial Pal 3834-0102
5. Drop and String Lights
6. Shop Vacuum Cleaner
7. Megger - 1000 VDC
8. TTR
9. Nitrogen bottle (small) and regulator/hose